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CLAIMS

1. Protected alcohol with formula (1)

$$(R^1 - O_{-})_m PG \qquad (1)$$

wherein R^1 represents a linear, straight-chain alkyl group having 26-30 C-atoms, m is 1 or 2, and PG represents a protecting group chosen from the group of substituted methyl ethers, substituted ethyl ethers, substituted benzyl ethers and (substituted) silyl ethers with at least one substituent on the Si-atom being not a methyl group, in case m = 1; and a diol protecting group in case m = 2, with the proviso that PG is no saccharide.

2. Process for the preparation of a protected alcohol according formula (1)

$$(R^1 - O -)_m PG \tag{1}$$

wherein R¹ represents a linear, straight-chain alkyl group having 26-30 C-atoms, m is 1 or 2, and PG represents a protecting group chosen from the group of substituted methyl ethers, (substituted) ethyl ethers, (substituted) benzyl ethers and (substituted) silyl ethers with at least one substituent on the Si-atom being not a methyl group, in case m = 1; and a diol protecting group in case m = 2, with the proviso that PG is no saccharide, via an organometallic cross coupling reaction wherein a linear, straight-chain nucleophilic organometallic reagent of formula RCH₂M₁ is reacted with a linear, straight-chain electrophile of formula (LG-CH₂-A-O-)_mPG (or a linear, straight-chain electrophile of formula RCH₂-LG with a nucleophilic organometallic reagent of formula (M₁CH₂-A-O-)_mPG), wherein R is H or a linear, straight-chain alkyl group with 1-28 C-atoms, M1 represents Li, Na, K, BZ₂, wherein each Z independently represents OH, an alkyl group or an alkoxy group, or the 2 Z-groups together form a hydrocarbon ring, MgX, wherein X=halogen, ZnX, wherein X= halogen or CH₂Si(CH₃)₃), or MnX, wherein X=halogen,

A is a C₀₋₂₈ linear, straight-chain alkylene group,

LG represents a leaving group, and m and PG are as described above.

- 3. Process according to claim 2, wherein the organometallic cross coupling reaction is performed in the presence of a transition metal catalyst and wherein M¹ represents MgX with X is halogen.
 - 4. Process according to claim 3, wherein the nucleophilic organometallic reagent reacts with an alkyl halide, alkyl arylsulfonate or alkyl mesylate.
 - 5. Process according to any one of claims 2-4, wherein first the protected alcohol with formula (1) is prepared according to any one of claims 2-4 and subsequently the protected alcohol is subjected to deprotection.

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